

REMARKS

Applicant respectfully requests reconsideration of the allowability of the claims in the instant application in view of the following remarks.

Interview Summary

Applicant thanks the examiner for the courtesy that he extended to Applicant and his attorney on July 31, 2006 during the interview that was held at the United States Patent and Trademark Office to discuss the rejections that were made in the Office Action and to address the informality raised in the Office Action by the examiner.

During the interview the parties reached an agreement that the parties agreed to in the following terms, which were dictated by the examiner and recited back to him by Applicant's attorney to assure their accuracy: "Applicant demonstrated a structural feature of the claimed invention which is not taught by the prior art and overcomes the rejections of the last office action, because the prior art does not teach a traffic layer that is separate, removable, and supported by the support layer claimed. The case is in non-final status. Applicant will formally respond to the last Office Action in light of the interview."

With regard to the informality, in view of the reasons discussed in the interview and set forth below, the examiner withdrew his objection.

Remarks Regarding the Office Action

1. Discussion of the Prior Art

In the Office Action, the examiner rejected all of the pending claims as being obvious over various combinations of three applied art references: (1) Papetti (USPN 4,726,708); (2) Taguchi et al. (USPN 5,200,261); and Ragazzo (USPN 5,636,938). All of the rejections rely on the combination of Papetti and Taguchi et al. Ragazzo was applied in combination with the other two references and only with regard to two dependent claims, i.e., claims 45-46. Although during the interview, the parties agreed that the claims are patentable over the applied art, the following discussion is set forth to elucidate the differences between the claims and the applied art.

Papetti and Taguchi et al. do not teach all of the limitations of the instant claims. *See*, MPEP § 2143.03 ("To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."). In particular, the teachings of those references are lacking in at least the following ways:

A. A portable roadway or portable platform¹ . . . hav[ing] sufficient strength to support construction vehicle traffic: The examiner asserted in the Office Action that these limitations are taught by Papetti in FIG. 5 and by col. 1, lines 8-14 ("Passage 1") and col. 2, line 64 to col. 3 ("Passage 2). Passage 1 recites:

The invention relates to mattress-type gabion for use as a covering or other protective structures for preventing soil erosion caused by surface water and infiltration, and for consolidating soil against landslides in the building of river embankments, lakeside, coastal and mountain side earthworks, road construction and similar works.

(Emphasis added.)

¹ Independent claim 27 and its dependent claims are directed to a "portable roadway" and independent claim 36 and its dependent claims are directed to a "portable platform."

Passage 2 recites:

The base sheet 1 features folds suitable for the forming of the "ribbing" 2 and longitudinal edges 5. The sheet constituting the cover is shown at 3.

The stable connection is effected, producing a monobloc body, the "ribbing", between the two upraised sections of metal netting, by means of second twisting operations carried out on the metal netting at points 4 of the warp, and at the minimum possible distance from the base sheet 1.

More particularly the base sheet 1 is composed of a wire mesh (See FIG. 4) and is provided with a pair of cuts 6, 7 (FIG. 2) parallel to the longitudinal edges 8 and 9 of the sheet which is far longer than it is wide. The cuts 6 and 7 are spaced apart by the creased or folded regions 2. Each fold 2 is formed by a crease 2a at the peak or crest of the fold and a pair of creases 2b at the junction of the folds with the freight base 1a defined between the folds. Each fold, therefore, forms panels 2d and 2e turned toward a respective compartment 10 generated when the folds are produced.

When each fold is produced, it is tied at points 4 by twisting the wire around the vertical portions of the hexagonal mesh of the two panels 2e and 2d which are formed as can be seen from FIG. 6.

In addition, folds 11 and 12 are formed in edge strips defined between each cut 6, 7 and the associated edge 8, 9.

The edge strips are then folded upwardly at creases 14, for example, so that each fold 11 or 12 comes to lie along the tied fold 2 previously formed. Additional ties 15 and 16 hold these folds in place (FIG. 4), thereby defining the sides of the compartments 10.

The upwardly open compartments 10 can be filled with ballast 16 (FIG. 5) and the cover sheet 3 can be applied. This cover sheet can also be composed of hexagonal wire mesh. The cover sheet can be tied in place to the ribs 2 and the lateral wires 17 and 18 defining the compartments as represented at 20.

It is understood that the protective framework afforded to the present invention, which has here been illustrated in outline and by way of example, extend to alternative embodiments with the same essential characteristics.

(Emphasis added.)

However, the only allusion at all to roadways (there is no allusion to platforms) in either of the passages is made in the underlined portion of Passage 1. Inspection of the underlined portion of Passage 1 reveals that it does not teach anything more than a gabion which is useful for consolidating soil to prevent landslides during the construction of roads.

With regard to FIG. 5, the Brief Description of the Drawing section of Papetti, states that FIG. 5 "illustrates the mattress gabion when set up and filled with ballast." (Emphasis added.) Without using Applicant's application as a blueprint, there is no suggestion in Papetti that the mattress gabion shown in that figure can be used as a portable roadway or portable platform having sufficient strength to support construction vehicle traffic. *See*, MPEP § 2141 (II) ("When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: . . . (C) The references must be viewed without the benefit of impermissible hindsight afforded by the claimed invention." (Emphasis added.)).

B. A traffic layer supported by said top surface [of the support layer]: In the Office Action the examiner asserted that the above cited figure and passages of Papetti also teach the traffic layer limitations of the instant claims.² However, during the interview the parties agreed that the figure only illustrates, and the passages only to teach, a gabion having a wire mesh top surface that is identified as the "cover sheet" in the passages and

² The examiner also made similar assertions in the Office Action with regard to the limitations in method claims 45 and 46 of "placing said plurality of movable panels onto said top surface [of the support layer] to form a traffic layer so that said support layer and said traffic layer interact to form at least one selected from the group consisting of a portable roadway and a portable platform."

indicated by reference numeral 3 in the figure. Papetti fails to teach a traffic layer atop the top surface that is created by the cover sheet portion of the gabion.

C. Each of the compartments [of the gabions] being substantially full of filler material having a density less than that of water: The examiner implied in the Office Action that Taguchi et al. teaches "a fabric wrapped, foamed, polystyrene ballast material." (Emphasis added.) The examiner cited for support the following portions of Taguchi et al.: col. 1, lines 8-16 (Passage 1); col. 3, line 67 to col. 4, line 20 (Passage 2); and col. 5, line 67 to col. 6, line 6 (Passage 3).

Passage 1 recites:

The present invention relates to a fiber-reinforced foamed material and a method of producing it. More particularly, the present invention relates to a fiber-reinforced foamed material which exhibits high resistance both to impact and flexing, as well as excellent shape maintaining characteristics and which is produced by allowing a foamable material capable of forming a highly rigid foamed body to foam together with specific composite fibers and/or specific composite yarns as reinforcers.

Passage 2 recites:

Thus, we find that fiber-reinforced foamed materials embodying the invention are useful in fields in which impacts and other dynamic forces which could never be sustained by known materials are expected to be applied, such as architectural and civil engineering materials, e.g., soil retainers and other civil engineering materials, building materials in general, partitions (for example in offices), furniture, waterproof protecting plates, heat-insulating materials, especially for use in refrigerators and air conditioners, automotive interior materials, packaging materials, and sports and general merchandise goods.

It is possible to obtain extremely lightweight materials which are especially economical to manufacture and which can serve as an excellent replacement for wood in many of the above uses.

The fiber-reinforced foamed material according to the present invention

exhibits a very high strength which widens the use of this material. For instance, the fiber-reinforced foamed member of the present invention can be used as the materials of various off-shore facilities such as airports, pontoon bridges, tennis courts, golf links and playgrounds.

(Emphasis added.)

And Passage 3 recites:

The reason why a polymer having a benzene ring is preferably used in this invention is that this type of polymer generally exhibits high rigidity even in an amorphous or non-crystalline state and that the foamed product exhibits high shape maintaining characteristics and dimensional stability. The high rigidity of the foamed material enables the tensile or compression stress to be borne simultaneously by the foamed material and the fibers, thus ensuring a high reinforcing effect.

However, upon close inspection, it is evident that there is no suggestion in the cited passages, or anywhere else, that Taguchi et al. teaches that the fiber-reinforced foam material is a ballast material. Rather, all of the descriptions in the cited passages of Taguchi et al. tout the impact resistance, structural, and thermal insulating properties of the fiber-reinforced foam material. Moreover, as evidenced by the dictionary definition Applicant submitted with his May 1, 2006 Amendment, ballast is primarily characterized by its heavy weight. In contrast, Taguchi et al. emphasizes the light weight characteristics of the fiber-reinforced foam material by describing it as "extremely lightweight" (see Passage 2 above) and by disclosing that the material may be provided with a waterproof surface and be used as "swimming aids, for example safety rings to be worn or grasped by a swimmer." (Col. 4, lines 26-34).

2. Lack of Motivation for Combining Papetti and Taguchi et al.

There is a complete lack of motivation for a person skilled in the art to modify the teachings of Papetti with the teachings of Taguchi et al. to arrive at Applicant's claimed invention.

As is evident from Passage 1 of Papetti quoted above, the purpose of Papetti's gabions is to consolidate the soil to prevent landslides. Thus, Papetti, when considered in its entirety, teaches away from the claimed invention, since the purpose of Applicant's invention is to avoid soil consolidation. MPEP 2141.02 (VI) ("PRIOR ART MUST BE CONSIDERED IN ITS ENTIRITY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS"); Applicant's specification at page 3, lines 45-46 ("The support components of the instant invention result in greatly reduced soil compaction over traditional methods.").

Inasmuch as Papetti describes the gabion itself to be made of metal netting (col. 1, line 65), it is clear that the bulk of the weight necessary to consolidate the soil would come from the ballast contained within the gabion. Thus, it would contradict the teachings of Papetti to use the lightweight fiber-reinforced foam material taught by Taguchi et al. to replace the ballast in Papetti's gabions and such a replacement would render Papetti's gabions unsatisfactory for their intended purpose of soil consolidation. MPEP § 2143.01 (V) ("THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE").

3. The Applied Art Fails to Teach the Desirability of Applicant's Claimed Invention

Papetti and Taguchi et al., whether taken together or singly, fail to suggest the desirability of Applicant's claimed invention. MPEP § 2143.01 (I) ("THE PRIOR ART

MUST SUGGEST THE DESIRABILITY OF THE CLAIMED INVENTION”). As mentioned above, the purposes of Papetti’s gabions is to consolidate soil. Taguchi et al. teaches a fiber-reinforced foam material. There is no teaching in either of these two references that suggests the desirability of creating a portable road or platform comprising (1) a support layer comprising multi-compartment gabions substantially full of a filler material having a density less than that of water, and (2) a traffic layer supported by the top surface of the gabions comprising a plurality of panels that have been removably placed upon that top surface.

4. Informalities

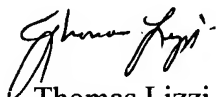
In the Office Action the examiner objected to claim 45 because its preamble states only: “A method comprising the steps of.” The examiner asserted that this method of claiming is vague and required Applicant to amend the claim to state an intended purpose for the claimed method.

Applicant has been unable to find any support in the MPEP or elsewhere for the examiner’s implication that a method claim must state an intended purpose. Moreover, Applicant did a Lexis search of patents issued in the last two years and found that at least 277 patents have been issued wherein the preamble of the respective claim 1 of those patents each recites merely “A method comprising the steps of.” Accordingly, there is no basis for requiring that the preamble of a method claim recite an intended purpose for the method.

Conclusion

In view of the foregoing, Applicant respectfully submits that the claims are in condition for allowance and requests that a "Notice of Allowance" be issued without further delay.

Respectfully submitted,



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